

CLAIMS

1. (Currently amended) A cordless telephone, comprising:
 - a remote handset; and
 - a base unit matched to said remote ~~handset~~; ~~handset~~, wherein said remote handset comprises:
 - an MPEG-a digital audio bit stream player integrated within at least one of said remote handset and said base unit adapted to play a digital audio bit stream comprising music; and
 - a summer adapted to digitally sum a digitally synthesized ring tone indicating an incoming call to said base unit with an MPEG-the digital audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with said music; and
 - a means for muting the playing of said digital audio bit stream by an action initiated by a user of said cordless telephone when said cordless telephone receives a telephone call.
2. (Canceled) ~~The cordless telephone according to claim 1, wherein:~~
 - ~~—— said MPEG audio player is integrated within said remote handset.~~
3. (Canceled).
4. (Currently amended) The cordless telephone according to claim 1, wherein:
 - said digital MPEG-audio bit stream player is one of an MPEG player and an MP3 player.
5. (Canceled) ~~The cordless telephone according to claim 2, wherein:~~
 - ~~—— said MPEG audio player is an MP3 player.~~
- 6-8. (Canceled)
9. (Currently amended) A method of integrating an MPEG-operating audio player in a cordless telephone comprising a remote handset and a base unit matched to said remote handset, the method comprising:
 - ~~—— connecting a base unit of said cordless telephone to a public-switched telephone network (PSTN);~~
 - the remote handset playing pre-loaded MP3-a digital audio bit stream comprising music from a remote handset of said cordless telephone;
 - the remote handset digitally summing a digitally synthesized ring tone indicating an incoming call to said base unit with an MPEG-the digital audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with said music; and

the remote handset muting said playing of said ~~pre-loaded MP3 music~~ digital audio bit stream by an action initiated by a user of said cordless telephone when said cordless telephone receives a telephone call.

10. (Currently amended) The method of ~~integrating an MPEG audio player in a cordless telephone~~ according to claim 9, wherein:

said muting pauses said playing of said ~~pre-loaded MP3 music~~ digital audio bit stream.

11-18. (canceled)

19. (Currently amended) ~~Apparatus for integrating an MPEG audio player in a~~ A cordless telephone, comprising:

a remote handset; and

a base unit matched to said remote handset, wherein said remote handset comprises:

means for playing ~~pre-loaded MP3 music~~ a digital audio bit stream comprising music from a remote handset of a cordless telephone;

means for connecting a base unit of said cordless telephone to a public switched telephone network (PSTN);

means for digitally summing a digitally synthesized ring tone indicating an incoming call to said base unit with an MP3 a digital audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with said music; and

means for muting said playing of said ~~pre-loaded MP3 music~~ digital audio bit stream by an action initiated by a user of said cordless telephone when said cordless telephone receives a telephone call.

20. (Currently amended) The ~~apparatus for integrating an MPEG audio player in a~~ cordless telephone according to claim 19, wherein:

said means for muting pauses said playing of said ~~pre-loaded MP3 music~~ digital audio bit stream.

21-29. (Canceled)

30. (Currently amended) The cordless telephone according to claim 1, wherein:

said base unit is adapted (i) to receive from a telephone line a telephone audio signal representing a telephone conversation and (ii) to transmit the telephone audio signal to said remote handset; and

said summer is further adapted to digitally sum the telephone audio signal representing the telephone conversation with the MPEG-digital audio bit stream.

31. (Currently amended) The cordless telephone according to claim 30, wherein:

- the telephone audio signal is monaural;
- the MPEG-digital audio bit stream has a plurality of stereo channels; and
- the summer is adapted to digitally sum the monaural telephone audio signal into each of the plurality of stereo channels of the MPEG-digital audio bit stream, such that a sense of balance in the user is improved.

32. (Currently amended) The cordless telephone according to claim ~~30~~ 1, wherein:

- both said MPEG-digital audio bit stream player and said summer are jointly implemented as a single digital signal processor adapted to digitally sum the digitally synthesized ring tone with the MPEG-digital audio bit stream.

33. (Currently amended) The cordless telephone according to claim 32, wherein:

- the digital signal processor is adapted to digitally sum the digitally synthesized ring tone with the MPEG-digital audio bit stream by: (i) decoding the MPEG-digital audio bit stream to produce a digital reconstructed audio signal, and (ii) digitally summing the digital reconstructed audio signal with the digitally synthesized ring tone to produce a digital summed audio signal.

34. (Previously presented) The cordless telephone according to claim 33, wherein the cordless telephone further comprises:

- a digital-to-analog converter connected to said digital signal processor to receive the digital summed audio signal and to produce an analog audio signal suitable for outputting to the user.

35. (Currently amended) The method according to claim 9, further comprising:

- the base unit receiving from the PSTN a telephone audio signal representing a telephone conversation;
- the base unit transmitting the telephone audio signal to the remote handset; and
- the remote handset digitally summing the telephone audio signal representing the telephone conversation with the MPEG-digital audio bit stream.

36. (Previously presented) The method according to claim 35, wherein:

- the telephone audio signal is monaural; and

the ~~MPEG-digital~~ audio bit stream has a plurality of stereo channels; and
the step of digitally summing the telephone audio signal with the ~~MPEG-digital~~ audio bit stream comprises digitally summing the monaural telephone audio signal into each of the plurality of stereo channels of the ~~MPEG-digital~~ audio bit stream, such that a sense of balance in the user is improved.

37. (Currently amended) The method according to claim 35, wherein:

the steps of (i) playing ~~pre-loaded MP3 music~~ the ~~digital audio bit stream~~ from the remote handset of said cordless telephone and (ii) digitally summing the telephone audio signal with the ~~MPEG digital~~ audio bit stream are performed by a single digital signal processor.

38. (Currently amended) The method according to claim 37, wherein:

the step of digitally summing the digitally synthesized ring tone with the ~~MPEG-digital~~ audio bit stream comprises:

the digital signal processor decoding the ~~MPEG-digital~~ audio bit stream to produce a digital reconstructed audio signal, and

the digital signal processor digitally summing the digital reconstructed audio signal with the digitally synthesized ring tone to produce a digital summed audio signal.

39. (Previously presented) The method according to claim 38, further comprising:

digital-to-analog converting the digital summed audio signal to produce an analog audio signal suitable for outputting to the user.

40. (New) The cordless telephone according to claim 1, wherein said digital audio bit stream is one of (i) an MPEG stream and (ii) an MP3 stream.

41. (New) The method according to claim 9, wherein said digital audio bit stream is one of (i) an MPEG stream and (ii) an MP3 stream.

42. (New) The cordless telephone according to claim 19, wherein said digital audio bit stream is one of (i) an MPEG stream and (ii) an MP3 stream.